

REMARKS

1 In the Office Action mailed January 30, 1998, Claims 1-20 were rejected under 35 U.S.C.
2 §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim
3 the subject matter which applicant regards as the invention.

4 Claims 1-20 were further rejected under 35 U.S.C. §103(a) as being obvious over the prior
5 art.

6 In response, Applicant has made amendments to Claims 1, 3, 15, and 17 in view of the prior
7 art, as discussed below.

8 The Examiner further objected to Applicant's title "Universal Data Measurement, Analysis
9 and Control System" as not being descriptive. It is unclear to Applicant as to how to make the title
10 more descriptive than it is as filed; perhaps upon review of this response, Examiner will agree with
11 Applicant. Applicant has refrained from amending the title pending further direction from the
12 Examiner as to exactly what is confusing about the title, and respectfully requests information in
13 this regard.

14 15 16 35 U.S.C. §112, Second Paragraph

17 The Examiner has rejected Claims 1-20 under §112, second paragraph, as being indefinite.
18 In particular, the Examiner states that "a variety of types of input data components", as used in
19 claim 1, line [sic] and claim 15, line 1-2, is unclear as to the meaning attached to "data
20 components" and the distinction between the "data sets" and the "data components."

1 As a preliminary matter, it should be noted that “input data components” and “data sets” are
2 terms used in the preambles of Claims 1 and 15, and therefore should not be examined for the same
3 specificity as the actual elements of the claim. As stated by the Federal Circuit, “[t]he preamble of
4 a claim does not limit the scope of the claim when it merely states a purpose or intended use of the
5 invention.” In re Paulsen, 30 F.3d 1475, 31 USPQ 2d 1671, 1673 (Fed. Cir. 1994). Here, “input
6 data components” and “data sets” are terms merely included to state the purpose or intended use of
7 Applicant’s invention, and as such, it is unclear how they might make the claimed invention
8 indefinite or vague. The two terms are merely introductory language that provides a background for
9 the structure and operation of Applicant’s invention as claimed.

10 While Applicant believes that the aforementioned argument controls, it proceeds to provide
11 additional justification for the allowability of Claims 1 and 15. As originally recited in Claims 1
12 and 15, “input data components” are recited as “comprising data sets.” It seems casually apparent
13 that this indicates that “data sets” are a sub-set of “input data components.” Inversely, it is also
14 apparent that “input data components” are made up of more than one “data set.” Many of the other
15 elements of the method of Claims 1 and 15 recite actions being taken on “data components” that are
16 different than those taken on “data sets.” For example, in Claim 1, Applicant recites a “generating”
17 step of generating “at least one hierarchical index linked to each of the input data components,”
18 where the index is generated to include “a description of each of the data sets[.]” Applicant is at a
19 loss as to what language might provide a clearer disclosure.

20 It appears that the Examiner may be attempting to confine Applicant to the terms and
21 definitions used by the prior art references relied upon by the Examiner for subsequent rejections of
22 Applicant’s claims. Should this be the case, Applicant is compelled to point out that “inventors

1 may act as their own lexicographers,” so long as the format of the claims makes reasonably clear
2 the boundaries of the subject matter for which patent protection is sought. Lear Siegler, Inc. v.
3 Aeroquip Corp., 733 F.2d 881 (Fed. Cir. 1984). As stated above, Applicant has indicated the
4 relationship between “input data components” and “data sets,” and as such has fulfilled the 35
5 U.S.C. §112, second paragraph requirement for definiteness, and this ground for rejection should
6 therefore be dismissed.

7
8
9 **Independent Claims 1 and 15 and Dependent Claim 2**

10 These Claims stand rejected under 35 U.S.C. §103(a) as being obvious over the
11 combination of Wear, et al, and Ohtaki, et al. Applicant respectfully traverses the rejection for
12 reasons set forth after discussion of the teachings of these references.

13
14 **Wear, et al, U.S. Patent No. 5,606,661**

15 Wear discloses an “apparatus and method for scan-based testing in an object-oriented
16 programming environment,” or specifically, an apparatus and method for testing data correctness,
17 and communicating where in a plurality of data objects an error has occurred. *Column 1, lines 8-*
18 *37*. The Wear method and apparatus is configured to test and report on a single software program,
19 with the goal of completing an internal quality test of the data sets within itself and to itself (i.e. to
20 what the correct data should be). The Wear method and apparatus has no perception or capability
21 outside of a single series of data sets (i.e. a single data component). As such, the Wear device and

1 method cannot provide any sort of comparison of the data sets in one data component with the data
2 sets in another data component.

3
4 **Ohtaki, et al, U.S. Patent No. 5,123,103**

5 Ohtaki discloses a “method and system of retrieving program specification and linking the
6 specification by concept to retrieval request by reusing program parts.” Interpreted broadly, the
7 Ohtaki method and system is simply a storage, search and retrieval means for software
8 programming code, provided to assist programmers in the creation of new software programs by
9 allowing the programmers to retrieve previously-written lines of code that are related to the code
10 that is currently being created. The Ohtaki method is to create a hierarchical index to “objects”,
11 which are simply groups of code or code modules (e.g. subroutines or subprograms). The
12 hierarchical index is created based on “keywords” detected within the stored objects, as well as
13 being based upon words that describe the object’s contents (i.e. the purpose or function of the
14 particular subroutine or subprogram). The Ohtaki method and system will not permit the
15 comparison of the contents of the objects with the contents of other objects that are linked to
16 another instantiated index. It simply allows for the identification of, and linking to, a particular
17 object so that the object can be retrieved quickly when the keywords are a match. Also, the Ohtaki
18 method uses “generalization” to create the “keywords” for the index (e.g. if the word “Brazil” is
19 found in the object, then an appropriate keyword might be “Countries”); there is no indexing based
20 upon the measurements of the object itself.

1
2 **Patentability of Claims 1, 2 and 15**

3 Applicant's Claim 1, as amended, recites the novel and nonobvious method for "universal
4 data analysis, measurement and control" for a "variety of types of input data components
5 comprising data sets", that includes, in pertinent part, "comparing" at least one "data set" to another
6 "data set." As discussed above, neither Wear, nor Ohtaki will operate beyond a single "data
7 component." For example, one input data component may be Microsoft Project™; with its data
8 sets being in a variety of formats, including schedules, accounting, salaries, etc.; another input data
9 component may be Microsoft Word™, with its data sets comprising text documents. Applicant's
10 novel and nonobvious invention would permit the comparison of text documents from Word™
11 with schedule information from Project™. The systems disclosed by Wear and Ohtaki will only
12 operate on one or the other, but not both input data components (if it was even possible to analyze
13 Word™ and Project™ data using these systems). Furthermore, this is only one simple example of
14 the previously-unknown functionality of Applicant's invention; many, many other cases and types
15 of data components and data sets are compatible.

16 Additionally, the "testing" of the Wear system is simply internal integrity testing completed
17 and reported by the object itself; the linked index is simply used to "kick off" the internal testing of
18 each object.

19 Still further, Applicant's method and system includes "generating" a "hierarchical index"
20 that includes "a description of each of the data sets;" Applicant's "description" includes a
21 "quantified description" of the data set; the Ohtaki system index is merely created on keywords
22 found within, or generalized from the contents of the object.

1 It should by now be apparent that neither Wear, nor Ohtaki disclose or even hint at the
2 novel and nonobvious method and system for data analysis recited in Applicant's Claim 1, and
3 therefore this ground for rejection should be removed.

4 Similarly, Independent Claim 15, as amended, recites an "index" as having the identical
5 structure to the index recited in Claim 1; as such, and as discussed above, neither Wear, nor Ohtaki,
6 nor their combination disclose or make obvious such an index, because the Wear and Ohtaki
7 methods have very specific functions that are radically different from Applicant's Claim 15. This
8 claim too, therefore, should be allowed.

9 Dependent Claim 2 depends from Claim 1, and necessarily includes further limitations over
10 Claim 1, thereby making it even less obvious in view of the cited references, and it too should be
11 allowed.

12 13 **Dependent Claims 3-14 and 16-20**

14 These Claims stand rejected under 35 U.S.C. §103(a) as being obvious over the
15 combination of Wear in view of Ohtaki, and further in view of the publication, "Towards a
16 Framework for Software Measurement Validation," Fenton, et al.. Applicant respectfully traverses
17 the rejection for reasons set forth after discussion of the teachings of these references.

18 19 **Wear and Ohtaki**

20 As discussed above, said discussion incorporated herein by reference, Wear and Ohtaki
21 disclose systems and methods that are very limited in their application. In particular, neither can
22 handle data sets from different data components - they are restricted to a single type, source and

1 format of data for their input. Consequently, they fail to disclose any method for indexing data
2 from different data components.

3
4 **Fenton et al, "Towards a Framework for Software Measurement Validation," IEEE**
5 **Transactions on Software Engineering, vol. 21, No. 12, pages 929-944, December, 1995.**

6 Fenton is a treatise advocating the arrival at a standardized, robust, and "physically real"
7 unit of measure to describe the attributes for software and software development projects. In fact,
8 Fenton simply discusses the many issues revolving around software measurement, with the goal of
9 convincing the reader that a standardized system of measure is necessary in order to arrive at
10 meaningful results. Moreover, Fenton focuses on the consistency and accuracy of a measurement
11 framework, and doesn't even address any practical applications beyond simply defining a basis for
12 analyzing software and software development projects. The Fenton paper's focus is on quantifying
13 and qualifying the trends and results of a single data source, with the Fenton models being
14 concerned with units and scale types.

15
16 **Patentability of Claims 3-14 and 16-20**

17 Applicant's Claims 3-14 and 16-20 recite the novel and nonobvious systems and methods
18 for indexing data sets from disparate input data components. No other system, paper, method or
19 device has addressed this enormous feat! As discussed above, neither Wear nor Ohtaki have a
20 perception outside of a single data component; their functions and processes are therefore extremely
21 limited in their application.

1 Fenton while somewhat related to the problem that Applicant has solved, is not on point.
2 Fenton is a lengthy discussion of how to accurately characterize and quantify data related to
3 software and software development; Applicant's system and method doesn't concern these issues.
4 In fact, Applicant's method and system will function equally as well whether or not data is recorded
5 in the fashion advocated by Fenton - virtually any data for virtually any data source under virtually
6 any measurement scale can be indexed and compared by Applicant's novel and nonobvious system
7 and method. Again, the strength of Applicant's invention is that it establishes a defined model in
8 order that data from disparate data sources can be compared to one another; no other reference
9 discusses this because they are concerned with solving other problems that are unrelated to the
10 problem solved by Applicant.

11 Applicant's Dependent Claims 3-14 and 16-20 cannot, therefore, be obvious in view of the
12 cited references, and they should be allowed.

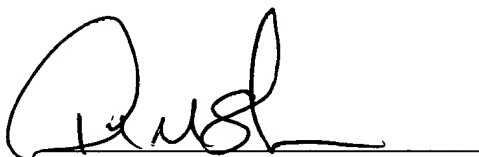
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2 **Conclusion**

3 In view of the foregoing amendments and remarks, Applicant respectfully requests that the
4 application be reconsidered, the claims be allowed, and the case passed to issue.

Respectfully submitted,

STEINS & ASSOCIATES

A handwritten signature in black ink, appearing to read 'K. Steins', written over a horizontal line.

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